

LECTOTYPIFICATION OF *QUERCUS EMORYI* AND *Q. HYPOLEUCA* (FAGACEAE).—Leslie R. Landrum, Department of Botany, Arizona State University, Tempe, AZ 85287.

In my studies of Arizona oaks, I have found two species that need lectotypification, *Quercus emoryi* Torr. and *Q. hypoleuca* Engelm.

*Quercus emoryi* Torr. in W. H. Emory, Not. milit. reconn. 152. pl. 9. 1848.—TYPE. USA, "common in the elevated country between the Del Norte and the Gila [rivers]," *W. H. Emory s.n.* (leaves and twig on type specimen from the Torrey herbarium at NY!, hereby designated as lectotype).

The type specimen is a mixed collection: the twig and leaves are of the species commonly known as *Q. emoryi* and the fruits are probably of *Q. turbinella* Greene or *Q. grisea* Liebm. The illustration and original description of Torrey are based on both elements. Therefore, it is necessary to lectotypify *Q. emoryi* with the twig and leaves portion of the type specimen and exclude the acorns.

The scales on the acorn cup on the type sheet have attenuate, non-lustrous tips and raised, warty bases and the peduncle is 14 mm long. These characteristics are typical of the white oaks *Q. turbinella* and *Q. grisea*. Acorns of the black oak traditionally known as *Q. emoryi*, represented by the twig and leaves on the type sheet, have scales with blunt to truncate, lustrous tips and thin, non-warty bases and the peduncles are rarely over 2 mm long.

The fact that the type sheet of *Quercus emoryi* is a mixed collection seems to have been known for years. There are penciled notes in two handwritings (one of which is probably George Engelmann's) that indicate this. Furthermore, Engelmann stated in his paper on oaks in 1876 (Transactions of the Academy of Science, St. Louis 3: 372–400) that "the peduncled acorn of Torrey's figure may belong to . . . [*Q.*] *undulata*," a white oak. Sargent (Silva of North America, 1895), in his citation of Torrey's original publication, excluded that part of the illustration containing the fruit with a long peduncle.

*Quercus hypoleuca* Engelm., Trans. Acad. Sci. St. Louis 3:384. 1876.—*Quercus hypoleucoides* Camus, Bull. Mus. Nat. Hist. Paris, ser. 2, 4: 124. 1932. A new name for *Q. hypoleuca* Engelm., proposed because of the prior existence of *Q. hypoleuca* Miquel.—TYPE. USA and northern MEXICO. "I name an Arizona oak which Torrey, in Mex. Bound. Rep. p. 207, refers to *Q. confertifolia*, H.B.K." *Wright 1869* at GH, representing one of the collections mentioned by Torrey and a specimen annotated by Engelmann, is hereby designated as the lectotype.

Torrey (in W. H. Emory, Report on the United States and Mexican Boundary Survey, 1859) mentions four collections: "Near Copper Mines, New Mexico; *Thurber*, No. 1869, *Wright*. Sierra del Pajarito, Sonora; *Schott*. San Francisco mountain; *Captain E. K. Smith*." I am uncertain which of these collections George Engelmann saw and in which herbaria he saw them. Fortunately, a lectotype can be chosen from two sheets he annotated: one at GH (*Wright 1869*) and another at MO (with both *Wright 1869* and *Schott s.n.*). Both were annotated by him as *Q. confertifolia*, so it is clear that he saw them before his publication of *Q. hypoleuca*. (The handwriting has been compared with a photocopy of a handwritten description of *Cereus giganteus* by Engelmann in his papers at MO). The sheet at GH has the name crossed out and is re-annotated by Engelmann (in the same handwriting) as *Q. hypoleuca* with the pertinent literature citation. It also has a note, signed "G.E." on the duration of the acorns, which Engelmann considered taxonomically important. The sheet at MO (3377694) is a mixture of Wright and Schott collections and there is no way to know confidently what part was collected by which collector. The sheet at GH is entirely of the Wright collection. Given the above information, I have chosen the sheet at GH, a syntype, as the lectotype of *Q. hypoleuca*. Another mixed Wright and Schott

sheet is housed at NY and comes from the Torrey herbarium. It was never annotated by Engelmann.

The name *Q. hypoleuca* Engelm. was a later homonym at the time of publication, and was renamed *Q. hypoleucoides* by Camus.

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*LEPYRODICLIS HOLOSTEIOIDES* (CARYOPHYLLACEAE), "NEW" TO NORTH AMERICA.—Richard K. Rabeler, University of Michigan Herbarium, North University Bldg., Ann Arbor, MI 48109-1057 and Richard R. Old, Department of Plant, Soil, and Entomological Sciences, University of Idaho, Moscow, ID 83843.

During a conversation with Francis E. Northam of the University of Idaho concerning *Apera* in Michigan, the senior author mentioned his interests in weedy Caryophyllaceae. Northam asked if he was familiar with *Lepyrodictis*; it was an agricultural weed in his area. Rabeler said he was and that he thought it had been reported elsewhere in North America. Further investigation revealed the latter statement incorrect.

The genus *Lepyrodictis* includes three annual species native to southwestern and central Asia. Although the plants resemble some species of *Stellaria*, the presence of but two styles, two entire capsule valves, and (usually) apically-notched petals allies *Lepyrodictis* with *Minuartia* (McNeill, Notes from the Royal Botanical Gardens, Edinburgh 24:79–155, 1962).

*Lepyrodictis holosteoides* (C. Meyer) Fenzl ex Fisch. & C. Meyer (Fig. 1) (*lepyrodictis* or *pashenick*) is a large, often sprawling, annual. Since it was first found in 1959 by Lambert C. Erickson "10 miles S of Lewiston" [Nez Perce Co.], Idaho (seed collection, idps), *L. holosteoides* has become a serious problem in green pea and wheat fields in Nez Perce County, Idaho, and Whitman County, Washington; "it climbs up and spreads as a canopy over the top of wheat" (Roché et al., Pacific Northwest Extension Publication PNW-349, 1990). It is classified as a "Class B noxious weed" in Washington, requiring officials to take actions aimed at restraining its further advance (Roché et al., Pacific Northwest Extension Publication PNW-349, 1990). This is not altogether unexpected since it is a weedy species in its native environs: found "commonly among crops, . . . surroundings of villages, wasteland, vegetable gardens" in the Caucasus region of the USSR (Gorshkova in Komarov and S[c]h[c]hkin, Flora of the USSR, 6:368–369, 1936 [1970]); "widely distributed and common as a field weed" in Pakistan (Ghazanafar in Nasir and Ali, Flora of Pakistan, 175:18–20, 1986).

The following collections of *Lepyrodictis holosteoides* are known (herbarium abbreviations follow Holmgren et al. [Index Herbariorum, part I, 8th ed., 1990] except for idps = University of Idaho Plant Science Department, Moscow, and wsda = Washington State Department of Agriculture, Pullman).

IDAHO. Nez Perce Co.: Disturbed steppe, slope in Coyote Gulch, ca. 1.75 mi N of Clearwater River, 10 mi E of Lewiston, NE $\frac{1}{4}$  of NW $\frac{1}{4}$  of Sec. 16, T36N, R4W, May 1985, *R. R. Old s.n.* (NY); Coyote Canyon, 20 May 1986, *R. R. Old s.n.* (ID, idps, MICH, RM, WS, wsda). WASHINGTON, Whitman Co.: roadside gravel, Union Flat Creek, 2 mi E of Uniontown, Sec. 9, T12N, R46E, 29 May 1991, *Northam 91-3* (ID, idps, MICH, RM, WSU).

In spite of the above-mentioned agricultural awareness, it appears that *Lepyrodictis holosteoides* has escaped attention in the North American botanical literature. Regional floras that have appeared since 1959 (Hitchcock and Cronquist, Vascular Plants of the Pacific Northwest, Part 2, 1964; Hitchcock and Cronquist, Flora of the Pacific Northwest, 1973; St. John, Flora of Southeastern Washington and of Adjacent Idaho,